

Ballard Roadside Raingardens

Frequently Asked Questions

How will the Ballard Roadside Raingardens project impact on-street parking? SPU has tried to minimize the loss of on-street parking and its impact on homeowners by locating rain gardens on blocks with access to alley parking and, where possible, using spaces at the ends of the blocks where parking is already prohibited.

Why do the Roadside Raingardens seem to be concentrated in some areas? The locations for Roadside Raingardens were selected based on a combination of criteria including: infiltration rate of the soils, slope of the planting strip, proximity to monitoring stations, community support, and logistical factors such as the presence of water meters, driveways, or trees within the area. Because the goal is to capture stormwater, the facilities are generally located at the downstream ends of blocks where the stormwater is more concentrated.

How much will the Roadside Raingardens project impact access to the front of my house from the street?

In locating the rain gardens, the goal is to ensure that at least one access point from the street was provided along the front of each property.

I currently have problems with basement flooding. Will the Ballard Roadside Raingardens project result in increased basement flooding in this area? Based on our knowledge of groundwater flow, the size and location of the proposed

Based on our knowledge of groundwater flow, the size and location of the proposed facilities relative to basements and our past experience with constructing natural drainage projects in soil conditions similar to those found in Ballard, we believe that our project will not influence basement flooding. We have installed groundwater monitoring wells in this area to confirm our analysis and prior experience that the rain gardens will not cause basement flooding. If the data we collect indicates otherwise, we will modify our designs to eliminate the possibility of causing basement flooding.

Will the Ballard Roadside Raingardens project result in increased sewage backups in this area?

Roadside Raingardens will actually reduce the potential for sewage backups in this area by removing stormwater from the combined sewer system and infiltrating it into the ground. Because the Ballard roads drain to a combined sewer system, which means that it conveys all the stormwater and wastewater in the same pipes to the West Point Treatment Plant, removing stormwater from the system creates more capacity for the remaining flows.

What will happen to the water when the rain gardens overflow?

When the Roadside Raingardens reach their capacity, the water will overflow out of an outlet placed in the down-hill end of the rain garden, allowing the water to flow to the curb, down the gutter line, and into the existing stormwater inlet just as it did previously.

Why install rain gardens? Why not fix the combined sewer system?

SPU looked at the range of feasible options for reducing CSOs to meet our regulatory requirement, including such things as large storage facilities, separating stormwater from the wastewater into its own pipe system, and the use of green technologies such as rain gardens and permeable pavement. In determining the best mix of options, SPU evaluated both cost effectiveness and the potential for multiple benefits in order to get the most out of the ratepayer's money. For the Ballard CSO basin, the installation of Roadside Raingardens was found to meet both of these objectives. For more general information about the City of Seattle's wastewater and drainage systems policies and programs, please visit the following address:

http://www.cityofseattle.net/util/About_SPU/Drainage_&_Sewer_System/Plans/index.asp.

What will happen to existing plants and trees on blocks where Roadside Raingardens are planned?

Where new roadside rain gardens are planned, property owners may wish to transplant their existing plantings or trees from the planting strip to a different location on their property. If you are not sure whether your existing plantings might be impacted by this project, contact SPU as noted below.

If rain gardens collect and filter pollutants from stormwater, why don't rain gardens become "toxic ponds" over time?

Each teaspoon of healthy soil (enriched with compost) contains billions of organisms (bacteria and fungi), which are really good at breaking down most types of stormwater pollutants - like oil and grease from cars, pesticides and fertilizers, and pet waste. The organisms use the pollutants to generate food, preventing them from building up over time. Heavy metals, like copper from car brakes, cannot be transformed into food, but those same organisms that clean other pollutants are able to bind the metals and the dirt particles they stick to so that they don't wash off into the local waterway. While tiny amounts of some metals are toxic to fish and other aquatic life, much larger amounts are not a problem when bound in the soil. Some plants even use zinc as a nutrient.

Up to 99 percent of the metals are caught and bound up in the top inch or two of soil in a rain garden. Even in the most heavily trafficked areas, like along a four-lane freeway, similar projects have shown that only the top inch or two of soil may need to be replaced periodically in order to remove metal contaminants. The Washington Department of Transportation, which has miles of compost-amended soil and swales filtering runoff from our highways, has not seen any hazardous accumulations. Metals accumulation from Seattle's residential streets are anticipated to be low. For a roadside rain garden, like those we are constructing, we will monitor the soils to know when the concentrations may require such maintenance.

Who will maintain the rain gardens once they are planted?

SPU will be responsible for ensuring the establishment and long term function of healthy vegetation, including weeding, and watering within the rain gardens. SPU will select hardy, drought-tolerant plants for these areas, ensuring that maintenance needs are kept to a minimum. Homeowners are welcome to augment the City's maintenance efforts if they prefer an exceptionally high level appearance.

Will this project lower my property value?

Property owners in close proximity to natural drainage projects report that their property values have increased as a result. Of course there are numerous factors that contribute to the value of a home or property, but in general the plantings are viewed as an enhancement.

Will these projects impact my children's use of the planting strip as a play area? The planting strip is part of the public right-of-way. If a rain garden is proposed in the planting strip, it will no longer be suitable as a play area. However, this project will not impact any private yards.

What if I have questions or concerns?

SPU is committed to working with the community as we finalize designs and move toward construction. To share your questions or concerns, please contact the Ballard Roadside Raingardens team at SPU_BRR@seattle.gov or call (206) 386-9161